Amnicola limosa Say. Very variable and abundantly represented.

Amnicola galbana Haldeman. This characteristic fossil is very abundant in the White Pond formation. It shows some variation in the height of the spire, but seems to be easily separated from *A. limosa.* Several monstrosities of galbana were found in this collection; two were scalariform and the others (6) had the spire variously contorted, like the forms of *Planorbis complanatus* figured by European conchologists. One specimen had the spire almost concealed by the gibbous last whorl. Monstrosities seem to be rare, as only eight were found in a lot of over two thousand specimens.

Valvata tricarinata Say, var. *confusa* Walker. This is nearly as abundant as the *Amnicolas.* Only a small percentage of the specimens were typical *confusa* with two well-defined keels, the majority having the basal keel strongly developed, the upper part of the whorl being rounded. In some specimens the two keels are so strong that they form elevated ridges.

Physa ancillaria Say. Not uncommon.

Aplexa hypnorum Linne. Two specimens of a small Aplexa which seems referable to *hypnorum* are in the collection.

Planorbis campanulatus Say. Typical, but not abundant.

Planorbis bicarinatus Say. Many specimens of this species show a tendency to form spiral lines, similar to those on var. *striatus* Baker.

Planorbis deflectus Say. Common and typical.

Planorbis exacutus Say. But one specimen of this species was found.

Limnæa galbana Say. Not common.

Limnæa humilis Say. Not common.

Succinea retusa Lea. Not common.

ON CATALOGUING A COLLECTION OF SHELLS.

BY MRS. M. BURTON WILLIAMSON.

When I began to catalogue my shells I used a ledger blank book, but in time the book looked untidy, as the space was not sufficient for the addition of species new to the collection that from time to time

were added to it. Then I copied the whole list, leaving space for the introduction of species not listed. But in some cases the blank spaces were not needed while more space was required for families and genera not represented in the book. Again I copied the entire catalogue, excepting the west coast species which I listed on cards to form a card catalogue. In time this second book began to look far from neat, so I tried a new plan. I used "Ward's Catalogue of the Mollusca," marking with a small mark such species as I had, and inserted blanks between the printed leaves for species that were not found in the price list; but this made the pamphlet rather bulky and also necessitated my looking over two lists, the printed one and the written one, in order to find if I had certain species. The plan was satisfactory at first, then I thought out a better one which I will give you.

I used a patent cover for blank leaves such as students use for laboratory notes, examination papers, etc., in colleges and schools. I bought paper the proper size for the cover, about eight by ten inches. This paper had holes stamped out at the right place for the metal clasps to be inserted. I use ruled paper, as names and localities are quickly seen on the same line, but this is a matter of taste, as dots can mark the space between names of shells and their localities.

The classification is a matter of choice. I use the same as that found in "Tryon's Structural and Systematic Conchology" for marine shells, excepting the west coast shells, for which I use another classification. My reason for using Tryon's is, if I get a shell from a family new to me I know where to list it immediately by referring to the Systematic Conchology, for by constantly studying and referring to this work I have become tolerably conversant with the classification.

I wrote only on one side of the paper when making out this new list, and paged only this side. This left a blank opposite each page to be used if the page became full. This blank page I numbered alphabetically to correspond with the numbered page. For example, if I required the blank leaf opposite page 5, I numbered it 5^{a}, and if I found it necessary to add new leaves at this place they would be paged 5^{b}, 5^{c}, 5^{d}, etc. on the left page, on the right 5^{1}, 5^{2}, 5^{3}, etc. The possibility of adding new leaves, one after another, or of taking out and rewriting the leaves is the strong feature in favor of using these covers. The use of the alphabet, or as much of it as is needed

in conjunction with the figures, makes repaging from time to time unnecessary when the book is enlarged.

At the front of this catalogue I have an index of genera arranged alphabetically. By indexing according to genera much space is saved and it does not take much time to refer to the page for species if one does not remember just where the species may be found in the classification.

For the use of beginners I will tell how I list specimens on a page. After leaving space at the left hand of each page for the binding of the leaves with the metal clasps, I write the name of the shell, by whom named and the locality all upon one line, keeping the locality of each species at the extreme right hand of the page. At the left hand I write the initials or some letter to indicate from what source the shell or shells were received, also the number of specimens. Above the name of the genera and species I write the name of the family in large letters. I use red ink for this, as the family name is more prominent in this way. As noted before, if the space for the specific name becomes too crowded I write upon the opposite page the name of the specimen I desire to list, indicating this upon the page where the others are listed. As they are listed specifically according to the alphabet the place assigned to it upon the blank page is the same as upon the page that is filled.

For West Coast shells, as before mentioned, I use cards. When a new specimen is listed upon a new card it is placed with the names of the rest of the genus. Any data desired are written upon each card. I got my cards cut and a hole punctured in each one by the thousand.* All cards for the specific name are the same size, those for the families and genera have an offset at the top. That is, a raised margin was left at the top of each card, these were raised sometimes at one end sometimes at the other end, and others had the margin in the center. When genera are listed upon a few cards the raised margins would hide each other if they were not placed at a little distance from each other, but if one generic name is at the extreme right hand of the row of cards in the box or drawer, another in the middle, still another at the extreme left hand, these generic names are readily detected by the eye, whereas if they followed one another all in a row some would be hidden from sight.

* It is best to use the cards of the Library Bureau, as they are of uniform size and quality.